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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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SQUIRE, SANDERS & DEMPSEY L.L.P.
14TH FLOOR
8000 TOWERS CRESCENT
TYSONS CORNER, VA 22182

EXAMINER

FERGUSON, KEITH

ART UNIT PAPER NUMBER

2617

DATE MAILED: 06/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,571

Applicant(s)

TROSSEN, DIRK

Examiner

Keith T. Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Response to Arguments

2. Applicant's arguments with respect to claims 1-35 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-5, 8, 10-13, 16, 18-21, 23, 26, 27, 29, 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abrol et al. in view of Wu et al. and Subbiah et al., newly recited reference.

Regarding claims 1, 2, 10, 11, 18, 19, 26, 27, 32-35, Abrol et al. discloses a method (fig. 5) of handing over a mobile node from first access router (radio access network) (RAN) to a second access router radio access network) (RAN) (paragraph 0013). Abrol et al. differs from claims 1, 10, 18 and 26 of the present invention in that it does not disclose sending a request message

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from the second access router to the mobile node; in response to the received request message, sending a connectivity report from the mobile node to the second access router and providing the second access router with information about the first access router through the connectivity report. Wu et al. teaches an access point (16) exchanges a probe request and response packets with a wireless terminal (paragraph 0045 lines 1-7), if the probe is successful, then the wireless terminal exchanges a handoff authentication message (connectivity report) with the handoff access point (16) (paragraph 0045 lines 7-10). Subbiah et al. teaches a mobile station transmits a binding message to a second access router including the address of the first access router (P:0024 lines 26-28). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Abrol et al. with sending a request message from the second access router to the mobile node; in response to the received request message, sending a connectivity report from the mobile node to the second access router and providing the second access router with information about the first access router through the connectivity report in order to perform seamless packet data service handoff of the mobile station and what is needed for seamless packet data service handoff between different radio access networks for continuous communication between networks, as taught by Wu et al. and Subbiah et al..

Regarding claims 3,12 and 20, Abrol et al. discloses an IP address of the first access router (paragraph 0026 and paragraph 0030).

Regarding claims 4,13 and 21, Abrol et al. discloses identifier (PRE_PZID) of the first access router (RANA 32) (paragraph 0034 line 6 through paragraph 0035 line 16).

Regarding claim 5, Abrol et al. discloses an identifier (PPP) of an Access Point (PDSN) attached to the first access router (paragraph 0036).

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Regarding claims 8,16,23 and 29, Abrol et al. discloses performing a handover of the mobile node from the first access router to the second access router after sending the connectivity (paragraph 0013 and paragraph 0037).

Regarding claims 18 and 34, Abrol et al. discloses a mobile IP network (fig. 1 number 18) comprising: a first access router (fig. 1 number 32) sending a request message from the second access router (fig. 1 number 34) to the mobile node (MS) (fig. 1 number 2 and paragraph 0035 lines 1-5); and in response to the received request message, sending a connectivity report from the mobile node to the second access router (paragraph 0035 lines 1-10).

4. Claims 6,7,14,15,24,25,30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abrol et al. in view of Wu et al. and Subbiah et al., newly recited reference as applied to claims 1,10,18 and 26 above and in further view of Honkasalo et al..

Regarding claims 6,7,14,15,24,25,30 and 31, the combination of Abrol et al., Wu et al. and Subbiah et al. differs from claims 6,7,14,15,24,25,30 and 31 of the present invention in that it does not disclose the second access router selecting one mobile node from a plurality of mobile nodes in order to send the request message and the one mobile node is selected randomly

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from the plurality of mobile nodes. Honkasalo et al. teaches a base station for selecting one mobile station from a plurality of mobile station in order to allocate a packet data channel (page 6, claim 5) and the one mobile node is selected randomly (i.e. by the MAC_ID) from the plurality of mobile nodes (page 6, claim 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Abrol et al., Wu et al. and Subbiah et al. with the second access router selecting one mobile node from a plurality of mobile nodes in order to send the request message and the one mobile node is selected randomly from the plurality of mobile nodes in order for the RAN with the IP network to allocate a channel to the Mobile station based upon its previous PZID for continuous internet connection when performing a handoff, as taught by Honkasalo et al..

5. Claims 9,17,22 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abrol et al. in view of Wu et al. and Subbiah et al., newly recited reference as applied to claims 1,10,18 and 26 above and in further view of Koodi et al..

Regarding claims 9,17,22 and 28, the combination of Abrol et al., Wu et al. and Subbiah et al. differs from claims 9,17,22 and 28 of the present invention in that it does not disclose performing handover of the mobile node from the first access router to the second access router before sending the connectivity report. Koodi et al. teaches performing handover of the mobile node from the first access router (current router) (CR) to the second access router (new router) (NR) before sending the connectivity report (paragraph 0020 through paragraph 0024). Therefore, it would have been obvious to one

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of ordinary skill in the art at the time the invention was made to modify the combination of Abrol et al., Wu et al. and Subbiah et al. with performing handover of the mobile node from the first access router to the second access router before sending the connectivity report in order for the old RAN within the IP network to know the capabilities of the new RAN when providing seamless communication to the mobile station when roaming into the new RAN area, as taught by Koodi et al..

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith T. Ferguson whose telephone number is (571) 272-7865. The examiner can normally be reached on 6:30am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Keith Ferguson

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June 7, 2006

KEITH FERGUSON
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read "Keith F.", written over the printed name and title.